

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252153

Luminaire Tested: **LE\_6B15D010 EC6B10209730 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252153  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B15D010 EC6B10209730 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1741.3 lumens  
Efficiency: N/A  
Efficacy: 120.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

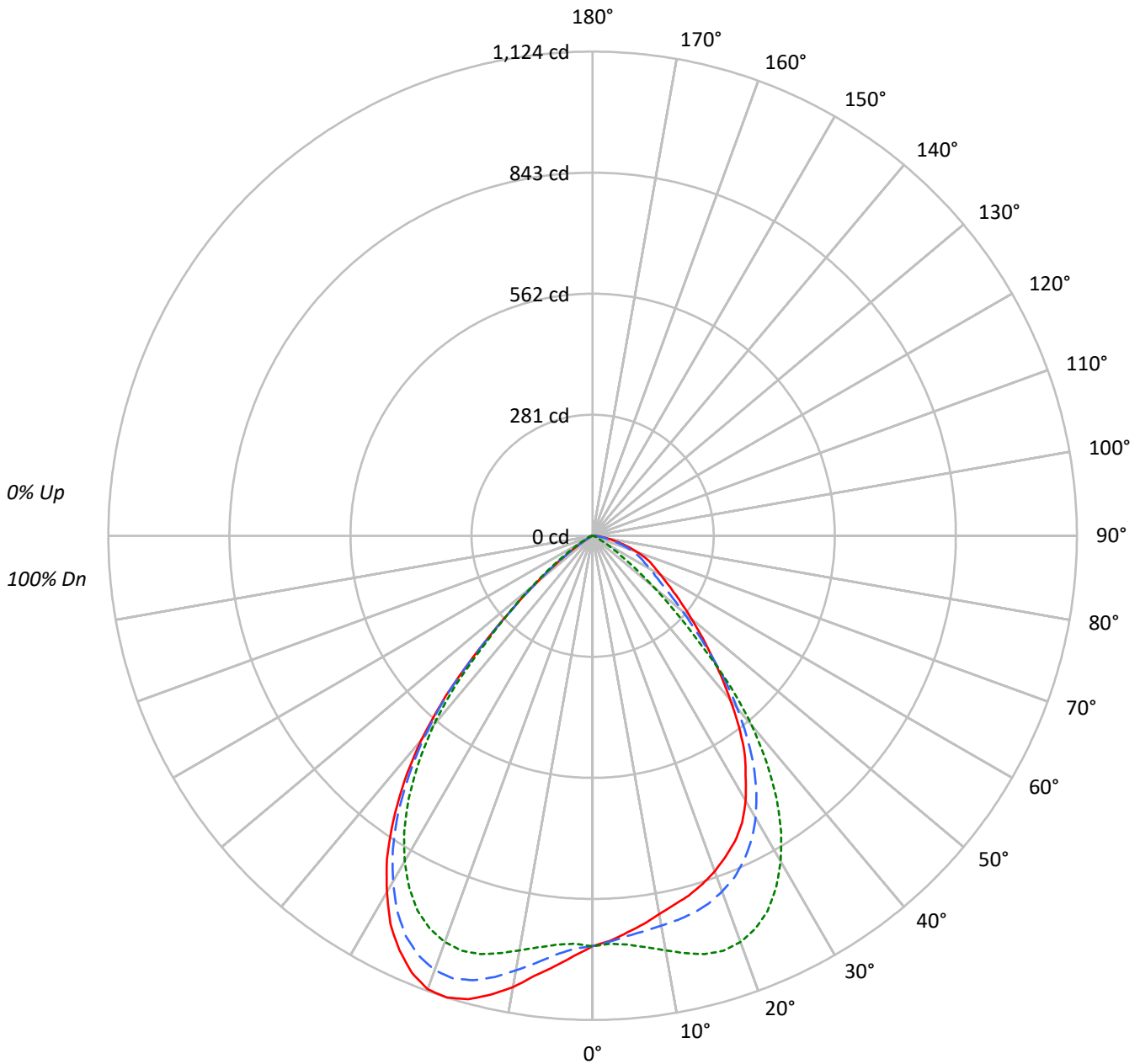
Input Watts (W): 14.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72																			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40																			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	62148	62148	62148
5°	60539	62386	65673
10°	59066	64737	70474
15°	58370	67907	75228
20°	57542	69678	77766
25°	56307	69163	76376
30°	53517	65728	71898
35°	48965	59255	64193
40°	42344	48936	52666
45°	35706	32099	34451
50°	30327	18574	17468
55°	26320	8917	6734
60°	23761	4162	1670
65°	23063	2393	556
70°	20677	1908	534
75°	16990	1386	227
80°	12699	714	0
85°	10929	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.0	5.3
10°-20°	280.4	16.1
20°-30°	428.5	24.6
30°-40°	448.1	25.7
40°-50°	290.7	16.7
50°-60°	115.4	6.6
60°-70°	54.8	3.1
70°-80°	26.1	1.5
80°-90°	5.3	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	800.9	46.0
0°-40°	1249.0	71.7
0°-60°	1655.1	95.1
0°-90°	1741.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1741.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	953	953	953	953	953	
5°	924	933	953	976	1003	87
15°	864	906	1005	1068	1114	244
25°	782	832	961	1026	1061	358
35°	615	652	744	788	806	380
45°	387	383	348	369	373	301
55°	231	197	78	61	59	210
65°	149	124	16	4	4	146
75°	67	55	6	2	1	73
85°	15	9	0	0	0	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6
2.5°	940.8	942.6	932.6	929.9	937.1	939.9	940.8	938.0	939.0	942.6	942.6
5°	924.4	926.2	917.1	914.4	921.6	923.5	926.2	925.2	928.0	933.5	932.6
7.5°	908.9	911.6	901.6	898.0	907.1	911.6	913.5	913.5	917.1	924.4	925.2
10°	891.6	895.2	886.1	884.2	894.4	898.9	899.8	901.6	907.1	917.1	918.9
12.5°	877.0	880.6	874.2	871.5	882.5	887.0	888.9	892.5	898.9	911.6	913.5
15°	864.2	867.0	859.8	857.9	868.9	874.2	875.2	880.6	888.9	903.4	906.1
17.5°	847.9	849.8	844.2	842.4	853.4	858.8	859.8	866.1	876.1	890.6	895.2
20°	828.8	830.6	825.1	823.2	834.2	840.6	841.5	847.0	858.8	874.2	878.9
22.5°	806.0	809.6	803.2	801.4	812.4	817.9	820.5	825.1	837.0	852.4	858.8
25°	782.2	782.2	777.8	776.9	786.9	793.2	792.4	798.8	810.5	826.0	831.5
27.5°	751.4	750.4	745.9	745.0	755.9	761.4	759.5	765.9	776.9	792.4	797.8
30°	710.4	712.1	705.8	704.0	713.1	722.2	721.2	727.6	738.6	753.1	756.8
32.5°	661.1	663.0	662.1	659.4	667.5	672.1	674.9	679.4	688.5	704.0	707.6
35°	614.8	612.0	608.4	608.4	616.5	623.9	621.1	626.6	635.6	651.1	652.1
37.5°	557.4	556.5	554.6	552.8	561.9	563.8	564.6	568.2	576.5	589.2	587.4
40°	497.2	498.1	497.2	493.6	499.1	506.4	505.5	507.2	514.5	523.6	520.9
42.5°	440.8	440.8	440.8	437.1	443.5	447.1	449.0	448.1	449.9	458.1	454.5
45°	387.0	388.0	387.0	386.1	387.0	388.9	387.0	386.1	386.1	388.9	383.4
47.5°	340.6	340.6	337.9	335.1	337.9	338.8	336.0	333.4	332.4	331.5	322.4
50°	298.8	297.8	296.9	292.4	295.1	296.0	292.4	290.5	286.9	282.4	271.4
52.5°	262.2	261.4	260.5	255.9	257.8	258.6	255.0	251.4	246.8	243.1	229.5
55°	231.4	230.4	230.4	227.6	225.9	227.6	224.0	221.2	214.9	210.4	196.8
57.5°	204.9	204.9	203.1	200.4	201.2	201.2	197.6	194.0	188.5	183.0	172.1
60°	182.1	182.1	182.1	179.4	179.4	179.4	177.6	174.0	169.4	163.9	153.0
62.5°	163.9	163.9	163.0	160.2	161.2	161.2	159.4	155.8	151.1	147.5	136.6
65°	149.4	149.4	149.4	146.6	146.6	147.5	145.8	142.1	138.4	133.9	123.9
67.5°	131.1	130.2	130.2	128.4	129.4	130.2	128.4	125.6	121.1	118.4	109.2
70°	108.4	109.2	110.2	107.5	108.4	108.4	107.5	104.8	102.0	99.2	91.1
72.5°	88.4	88.4	87.4	86.5	86.5	87.4	85.6	82.9	81.0	79.2	72.9
75°	67.4	66.5	67.4	65.6	65.6	65.6	63.8	62.9	61.9	59.2	54.6
77.5°	49.1	48.2	48.2	46.5	47.4	47.4	46.5	44.6	42.8	41.9	38.2
80°	33.8	33.8	33.8	32.8	32.8	31.9	31.9	31.0	29.1	28.2	26.4
82.5°	22.8	22.8	22.8	21.9	21.9	21.9	21.0	20.0	19.1	18.2	16.4
85°	14.6	14.6	14.6	13.6	13.6	13.6	12.8	12.8	11.9	10.9	9.1
87.5°	8.2	8.2	8.2	7.2	7.2	7.2	7.2	7.2	6.4	5.5	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6
2.5°	949.0	936.2	944.4	944.4	941.6	949.0	953.5	957.1	956.2	948.0	947.1
5°	941.6	930.8	939.9	940.8	938.0	948.0	954.4	959.0	959.9	952.6	953.5
7.5°	936.2	927.1	939.0	942.6	941.6	950.8	958.1	965.4	969.0	963.5	964.5
10°	933.5	926.2	939.0	944.4	945.4	955.4	966.2	976.2	980.9	977.2	979.9
12.5°	929.9	925.2	939.9	948.0	951.8	961.8	975.4	987.2	994.5	992.6	998.1
15°	926.2	922.5	939.9	951.8	956.2	965.4	980.9	998.1	1006.4	1005.4	1012.8
17.5°	917.1	916.1	934.4	947.1	953.5	964.5	979.0	1000.0	1008.1	1010.0	1019.1
20°	902.5	902.5	922.5	936.2	943.5	953.5	971.8	991.8	1001.8	1003.6	1013.6
22.5°	882.5	884.2	903.4	917.1	928.0	935.2	954.4	975.4	984.5	987.2	998.1
25°	856.1	857.9	876.1	889.8	901.6	909.8	928.0	947.1	958.1	960.8	969.0
27.5°	821.5	825.1	842.4	856.1	866.1	871.5	890.6	910.8	918.9	921.6	929.9
30°	781.4	782.2	799.6	811.5	821.5	826.0	842.4	863.4	869.8	872.5	884.2
32.5°	732.2	731.2	747.8	758.6	766.9	772.2	789.6	803.2	809.6	814.1	820.5
35°	673.0	672.1	684.0	696.8	703.1	704.9	722.2	736.8	740.4	744.0	752.2
37.5°	606.5	606.5	616.5	622.9	630.2	633.0	641.1	657.5	663.9	663.0	669.4
40°	536.4	532.8	540.0	546.4	548.2	549.1	557.4	570.1	574.6	574.6	579.2
42.5°	462.6	457.1	458.1	461.8	463.5	457.1	462.6	470.9	468.1	471.8	472.6
45°	384.4	376.1	372.5	364.2	366.1	359.8	356.1	357.9	357.0	347.9	349.8
47.5°	320.6	306.0	299.6	287.8	285.0	277.8	273.2	265.0	257.8	257.8	253.1
50°	266.9	252.2	239.5	225.9	221.2	214.9	204.9	194.0	188.5	183.0	178.5
52.5°	224.0	208.5	193.1	178.5	172.1	163.9	150.2	139.4	129.4	123.9	118.4
55°	189.4	172.1	155.8	140.2	132.0	123.9	110.2	97.5	85.6	78.4	73.8
57.5°	163.0	146.6	129.4	112.9	105.6	96.5	82.0	68.2	57.4	49.1	44.6
60°	143.9	127.5	112.0	94.8	87.4	78.4	62.9	50.1	39.1	31.9	26.4
62.5°	127.5	112.9	96.5	81.0	73.8	64.6	50.1	37.4	27.4	20.0	15.5
65°	115.6	101.1	87.4	72.0	65.6	56.5	42.8	31.0	21.9	15.5	10.9
67.5°	102.0	89.2	75.6	62.9	56.5	49.1	36.4	26.4	18.2	12.8	9.1
70°	85.6	75.6	63.8	51.9	47.4	41.0	30.0	21.9	14.6	10.0	7.2
72.5°	68.2	60.1	51.0	41.9	38.2	31.9	24.6	17.2	10.9	7.2	5.5
75°	51.9	45.5	38.2	31.9	28.2	24.6	18.2	12.8	8.2	5.5	3.6
77.5°	35.5	32.8	27.4	21.9	20.0	17.2	11.9	8.2	5.5	3.6	1.9
80°	24.6	21.9	18.2	14.6	12.8	10.9	7.2	5.5	2.8	1.9	0.9
82.5°	15.5	12.8	10.9	9.1	8.2	6.4	4.5	2.8	1.9	0.9	0.9
85°	8.2	7.2	6.4	4.5	4.5	3.6	2.8	1.9	0.9	0.0	0.0
87.5°	4.5	3.6	2.8	1.9	1.9	0.9	0.9	0.9	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6
2.5°	958.1	958.1	957.1	968.1	955.4	968.1	961.8	968.1	959.0	958.1	959.0
5°	965.4	968.1	969.0	979.0	967.1	982.6	977.2	982.6	976.2	978.1	980.9
7.5°	979.9	984.5	983.6	996.4	984.5	1001.8	998.1	1006.4	1000.0	1001.8	1005.4
10°	996.4	1001.8	1002.8	1015.5	1004.5	1025.5	1020.9	1030.0	1024.5	1027.2	1031.9
12.5°	1015.5	1021.9	1022.8	1037.2	1025.5	1047.4	1044.6	1053.8	1049.1	1051.9	1057.4
15°	1030.0	1039.1	1041.0	1055.5	1042.8	1065.5	1063.8	1075.5	1068.2	1072.9	1077.4
17.5°	1037.2	1045.5	1049.1	1062.8	1051.9	1074.6	1072.9	1082.9	1077.4	1081.9	1087.4
20°	1032.8	1042.8	1045.5	1059.1	1048.2	1071.0	1068.2	1078.2	1072.9	1076.5	1081.9
22.5°	1016.4	1026.4	1030.0	1042.8	1032.8	1053.8	1052.8	1061.9	1054.6	1059.1	1063.8
25°	987.2	998.1	1000.0	1011.8	1000.9	1022.8	1020.9	1030.9	1025.5	1028.2	1034.6
27.5°	945.4	958.1	960.8	970.9	962.6	980.9	980.9	989.0	982.6	982.6	989.0
30°	895.2	908.0	909.8	918.0	910.8	927.1	928.0	936.2	926.2	931.6	932.6
32.5°	834.2	842.4	847.9	855.1	844.2	865.1	862.5	868.9	863.4	863.4	867.9
35°	760.5	770.5	773.2	782.2	773.2	789.6	789.6	793.2	787.8	787.8	795.0
37.5°	680.2	687.6	688.5	697.6	690.4	704.0	703.1	705.8	700.4	704.0	704.0
40°	586.5	592.0	593.8	598.4	597.4	607.5	606.5	608.4	605.6	606.5	608.4
42.5°	477.2	484.5	488.1	491.8	486.4	500.0	497.2	500.0	499.1	500.0	502.8
45°	351.5	357.0	359.8	360.6	358.9	367.0	373.4	367.9	368.9	367.0	370.6
47.5°	254.1	255.0	253.1	258.6	254.1	257.8	259.5	260.5	255.0	254.1	257.8
50°	174.0	178.5	172.1	174.9	174.0	177.6	175.8	176.6	171.2	174.0	172.1
52.5°	115.6	114.8	112.9	113.9	112.0	112.0	112.0	113.9	110.2	108.4	106.5
55°	70.1	68.2	64.6	63.8	63.8	64.6	62.9	61.0	61.0	60.1	60.1
57.5°	41.0	38.2	36.4	35.5	33.8	32.8	31.9	31.9	30.0	30.0	30.0
60°	22.8	20.0	18.2	16.4	16.4	15.5	14.6	13.6	13.6	13.6	12.8
62.5°	11.9	10.0	8.2	7.2	7.2	6.4	5.5	5.5	5.5	5.5	4.5
65°	8.2	6.4	5.5	4.5	4.5	3.6	3.6	3.6	3.6	3.6	3.6
67.5°	6.4	5.5	4.5	3.6	3.6	3.6	2.8	2.8	2.8	2.8	2.8
70°	5.5	3.6	3.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
72.5°	3.6	3.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
75°	2.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
80°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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CATALOG NUMBER: LE\_6B15D010 EC6B10209730 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	952.6	952.6	952.6	952.6	952.6	952.6	952.6	952.6
2.5°	967.1	966.2	967.1	969.0	965.4	976.2	970.9	976.2
5°	988.1	989.0	990.0	992.6	988.1	1001.8	994.5	1002.8
7.5°	1015.5	1016.4	1017.2	1020.0	1017.2	1030.9	1022.8	1030.0
10°	1043.6	1045.5	1045.5	1050.0	1047.4	1060.1	1054.6	1063.8
12.5°	1070.1	1071.9	1073.8	1076.5	1074.6	1088.2	1083.8	1091.0
15°	1091.0	1094.6	1095.6	1099.2	1097.4	1112.0	1106.5	1113.8
17.5°	1101.0	1104.8	1104.8	1109.2	1107.4	1122.9	1115.6	1123.9
20°	1095.6	1098.4	1099.2	1103.8	1102.0	1117.5	1110.1	1120.1
22.5°	1078.2	1079.2	1080.1	1084.6	1083.8	1097.4	1091.0	1097.4
25°	1046.4	1049.1	1048.2	1051.9	1051.9	1062.8	1055.5	1061.0
27.5°	1000.9	1003.6	1003.6	1008.1	1004.5	1015.5	1008.1	1016.4
30°	945.4	948.0	946.2	949.9	946.2	957.1	951.8	954.4
32.5°	878.9	878.9	879.8	880.6	878.9	888.9	883.4	888.9
35°	799.6	801.4	802.4	803.2	801.4	808.8	802.4	806.0
37.5°	710.4	714.9	714.0	714.9	712.1	721.2	715.9	717.6
40°	614.8	614.8	613.9	615.6	612.9	620.2	616.5	618.4
42.5°	503.6	506.4	502.8	507.2	500.0	510.0	506.4	503.6
45°	378.0	374.2	373.4	374.2	371.6	372.5	375.2	373.4
47.5°	257.8	257.8	255.9	253.1	256.9	257.8	254.1	254.1
50°	173.0	173.0	171.2	170.2	172.1	171.2	169.4	172.1
52.5°	110.2	106.5	106.5	108.4	106.5	104.8	107.5	105.6
55°	60.1	58.2	58.2	60.1	58.2	58.2	57.4	59.2
57.5°	29.1	30.0	29.1	29.1	29.1	29.1	28.2	29.1
60°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
62.5°	5.5	5.5	4.5	4.5	4.5	4.5	4.5	4.5
65°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
67.5°	2.8	2.8	2.8	2.8	2.8	3.6	2.8	2.8
70°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
72.5°	2.8	2.8	3.6	3.6	3.6	3.6	3.6	3.6
75°	1.9	1.9	1.9	0.9	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)